REMARKS

Claims 8-14 and 17-30 are pending in the case. Claims 1-7, 15, and 16 have been cancelled. The Examiner's reconsideration of the rejections is respectfully requested in view of the amendments and the remarks.

By the Final Office Action of September 24, 2003, claims 1 to 14 have been rejected under 35 U.S.C. 102(a) as being anticipated by Poston et al., *Dextrous Virtual Work*, Communications of the ACM, May 1996, pages 37 to 45. The Examiner stated essentially that Poston teaches all the limitations of claims 1 to 14.

Claim 8 claims, *inter alia*, "a rendering module for rendering a virtual view of the first graphic target depth marker overlaid on an actual view of an object including the target, and rendering a virtual view of the graphic instrument depth marker overlaid on the actual view such that a proximity of a predetermined portion of the instrument to the target is ascertainable based on a position of the graphic instrument depth marker with respect to the first graphic target depth marker."

Poston teaches a system for visualizing and manipulating medical images. Poston's system, called the virtual workbench, includes a computer screen, a pair of stereo glasses, a mirror and one or more 3D position and orientations sensors each on a handle (see Figure 1). The user looks at the mirror through the glasses and perceives a virtual image (see page 38, first full paragraph). Poston does not teach "a rendering module for rendering a virtual view of the first graphic target depth marker overlaid on an actual view of an object including the target," as claimed in claim 8. Poston teaches a virtual work environment. The actual work environment of Poston is hidden behind a

mirror. Thus, Poston does not teach an actual view of an object including a target. Therefore, Poston fails to teach all the limitations of claim 8.

Claims 9 to 14 depend from claim 8. The dependent claims are believed to be allowable for at least the reasons given for claim 8. At least claims 10 and 14 are believed to be allowable for additional reasons.

Claim 10 claims, "the graphics guide generator determines a second graphic target depth marker indicating a second target depth of the target, rendered as a virtual view overlaid on the actual view by the rendering module, wherein a distance between the virtual view of the first graphic target depth marker and the virtual view of the second graphic target depth marker is a predetermined target depth range of the target." Claim 14 claims, *inter alia*, "wherein said rendering module renders a virtual view of the at least one graphics path marker as an overlay on the actual view to which a portion of the instrument visible in the actual view is alignable."

Referring to claim 10, Poston teaches a contour tool for manipulating contours in slice images (see page 43). Poston does not teach "the graphics guide generator determines a second graphic target depth marker indicating a second target depth of the target, rendered as a virtual view overlaid on the actual view by the rendering module, wherein a distance between the virtual view of the first graphic target depth marker and the virtual view of the second graphic target depth marker is a predetermined target depth range" as claimed in claim 10. Poston's slice images are virtual views that clearly show a target, e.g., a heart wall. Poston's slice images are not actual views, and further the target is not hidden (see claim 8). Poston does not teach a predetermined depth range of a hidden target. Therefore, Poston fails to teach all the limitations of claim 10.

Referring to claim 14, Poston teach a system for perceiving a virtual tool (see Figure 2). Poston does not teach "a virtual view of the at least one graphics path marker as an overlay on the actual view to which a portion of the instrument visible in the actual view is alignable" a claimed in claim 14. A real handle of Poston is hidden behind a mirror (see Figure 1). Poston's viewing of a virtual tool does not teach an instrument visible in the actual view, much less that a rendering module renders a virtual view of the at least one graphics path marker as an overlay on the actual view to which a portion of the instrument visible in the actual view is alignable, essentially as claimed in claim 14.

The Examiner's reconsideration of the rejection is respectfully requested.

By the Final Office Action of September 24, 2003, claims 15-18 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Poston as applied to claim 1, and further in view of Hon (U.S. Patent No. 6,113,395). The Examiner stated essentially that the combined teachings of Poston and Hon teach or suggest all the limitations of claims 15-18.

Claims 17 and 18 depend from claim 8. The dependent claims are believed to be allowable for at least the reasons given for claim 8. The Examiner's reconsideration of the rejection is respectfully requested.

New claims 19-30 are believed to be allowable in view of the teachings of Poston and Hon.

For example, claim 19 claims "rendering a virtual view of a first graphic target depth marker indicating a first target depth of a hidden target overlaid on an actual view of an object including the target."

Poston teaches a virtual environment which hides an actual view (see Figure 1). Poston does not teach a virtual view of a target depth marker overlaid on an actual view, essentially as claimed in claim 19. Poston's work environment is hidden behind a mirror. Thus, Poston does not teach an actual view of an object. Therefore, Poston does not teach all the limitations of claim 19.

Hon teaches a virtual environment in which virtual instruments may be used in medical simulations (see col. 3, lines 48-53 and col. 9, lines 43-53). Hon also teaches force feedback simulation tools (col. 7, lines 16-21). However, Hon does not teach a virtual view of a target depth marker overlaid on an actual view, essentially as claimed in claim 19. Therefore, Hon does not teach all the limitations of claim 19.

Therefore, the combined teachings of Poston and Hon fail to teach or suggest all the limitations of claim 19.

Referring to claims 23 and 27, claim 23 claims "providing an instrument depth marker visible in the actual view such that a proximity of a predetermined portion of the instrument to the target is ascertainable based on a distance between the first graphic target depth marker and the instrument depth marker" and claim 27 recites, *inter alia*, "a rendering module for rendering a virtual view of the first graphic target depth marker overlaid on an actual view of an object including the target, wherein the actual view includes an instrument depth marker indicating a depth of an instrument relative to the virtual view of the first graphic target depth marker overlaid on the actual view."

Poston teaches a virtual environment which hides an actual view and replaces a handle with a virtual tool (see page 38, first paragraph). The handle of Poston is not visible in an actual view. The handle is hidden by a mirror (see Figure 1). Therefore,

Poston does not teach an instrument depth marker visible in the actual view, essentially as claimed in claim 23 and 27.

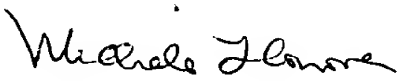
Hon teaches a virtual environment in which virtual instruments may be used in medical simulations (see col. 3, lines 48-53 and col. 9, lines 43-53). Hon also teaches force feedback simulation tools (col. 7, lines 16-21). These tools do not include depth markers. Therefore, Hon does not teach an instrument depth marker visible in the actual view, essentially as claimed in claim 23 and 27.

Therefore, the combined teachings of Poston and Hon fail to teach or suggest all the limitations of claims 23 and 27.

Claims 20-22 depend from claim 19. Claims 24-26 depend from claim 23. Claims 28-30 depend from claim 27. The dependent claims are believed to be allowable for at least the reasons given for the respective independent claims.

For the forgoing reasons, the present application, including claims 8-14 and 17-30, is believed to be in condition for allowance. The Examiner's early and favorable action is respectfully urged.

Respectfully Submitted,



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